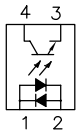


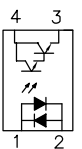
Kingbright

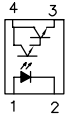
Optoelectronic Components

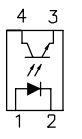
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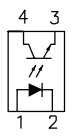


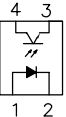
Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=±1mA, V _{CE} =5V	IF=±20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB814		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage AC input response	5000	35	20	300	0.1	0.2	4	3

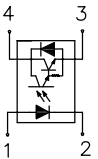
Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=±1mA, V _{CE} =2V	IF=±20mA, I _C =5mA	V _{CE} =2V, I _C =10mA, R _L =100Ω	Min.	Max.	Typ.
KB8141		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage High sensitivity AC input response	5000	35	600	7500	0.8	1	60	53

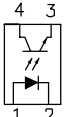
Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=1mA, V _{CE} =2V	IF=20mA, I _C =5mA	V _{CE} =2V, I _C =10mA, R _L =100Ω	Min.	Max.	Typ.
KB815		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage High sensitivity	5000	35	600	7500	0.8	1	60	53

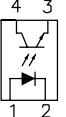
Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=5mA, V _{CE} =5V	IF=20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB816		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage High collector-emitter voltage	5000	70	50	600	0.1	0.2	4	3

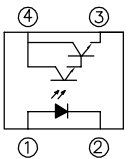
Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=5mA, V _{CE} =5V	IF=20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB817		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage	5000	35	50	600	0.1	0.2	4	3

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=5mA, V _{CE} =5V	IF=20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB851		VDE0884. NO.40006364	High collector-emitter Voltage	5000	350	-	-	0.1	0.3	4	3

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=1mA, V _{CE} =2V	IF=20mA, I _C =100mA	V _{CE} =2V, I _C =20mA, R _L =1000Ω	Min.	Max.	Typ.
KB852		VDE0884. NO.40006364	High collector-emitter voltage High sensitivity	5000	350	1000	15000	-	1.2	100	20

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=5mA, V _{CE} =5V	IF=20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB817-B		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage SMD Type	5000	35	50	600	0.1	0.2	4	3

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=5mA, V _{CE} =5V	IF=20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB817-M		UL NO.E225308 & VDE0884. NO.40006364	High isolation voltage	5000	35	50	600	0.1	0.2	4	3

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=1mA, V _{CE} =2V	IF=20mA, I _C =1mA	V _{CE} =2V, I _C =2mA, R _L =100Ω	Min.	Max.	Typ.
KB355NT		UL NO.E225308 & VDE0884. NO.40017614	High current transfer ratio Small package size	3750	35	600	7500	0.8	1.0	60	53

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=5mA, V _{CE} =5V		IF=20mA, I _C =1mA		V _{CE} =2V, I _C =2mA, R _L =100Ω	
						Min.	Max.	Typ.	Max.	Tr	Tf
KB356NT		UL NO.E225308 & VDE0884. NO.40017614	High collector-emitter Voltage Small package size	3750	80	50	600	0.1	0.2	6	8
KB357NT	Small package size		3750	35	50	600	-	0.2	4	3	

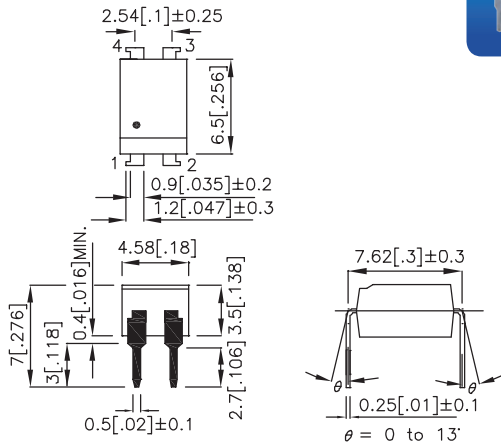
Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=±1mA, V _{CE} =5V		IF=±20mA, I _C =1mA		V _{CE} =2V, I _C =2mA, R _L =100Ω	
						Min.	Max.	Typ.	Max.	Tr	Tf
KB354NT		UL NO.E225308 & VDE0884. NO.40017614	AC.input response Small package size	3750	35	20	400	0.1	0.2	4	3

Part Number	Pin Configuration	Safety Standards	Features	Absolute Maximum Ratings		Electrical Characteristics					
				Isolation Voltage(AC) Viso(Vrms)	Collector Emitter Voltage V _{CEO} (V)	CTR(%)		V(sat) (V)		Response Time (μs) Typ.	
						IF=±1mA, V _{CE} =2V		IF=±20mA, I _C =1mA		V _{CE} =2V, I _C =2mA, R _L =100Ω	
						Min.	Max.	Typ.	Max.	Tr	Tf
KB3541NT		UL NO.E225308 & VDE0884. NO.40017614	AC.input response High sensitivity Small package size	3750	35	450	7400	0.8	1.0	60	53

KB814, KB8141, KB815, KB816, KB817, KB851, KB852



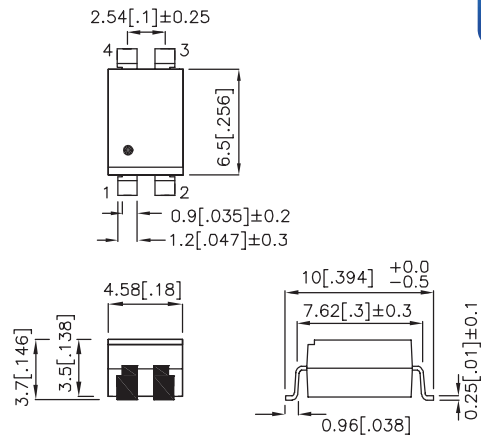
KB814



KB817-B



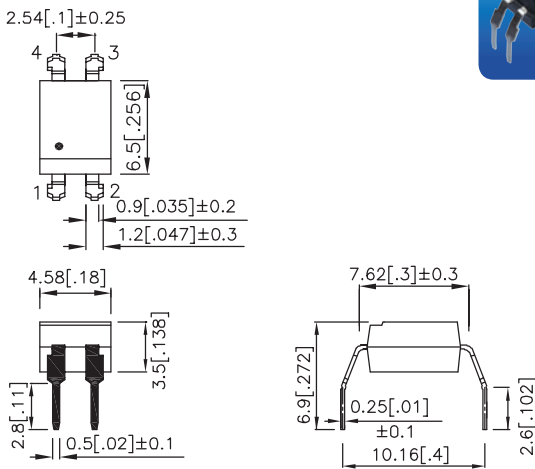
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KB817-M



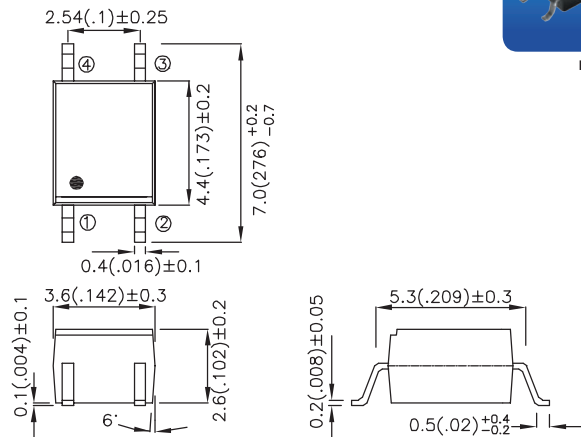
KB817-M



KB355NT, KB356NT, KB357NT, KB354NT, KB3541NT

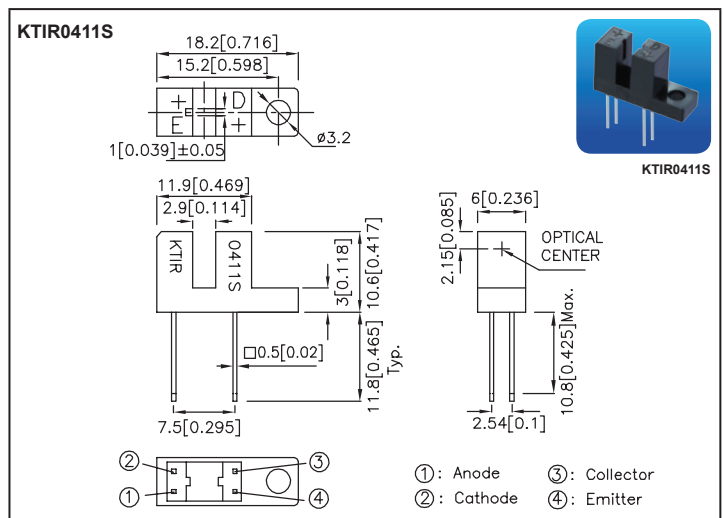
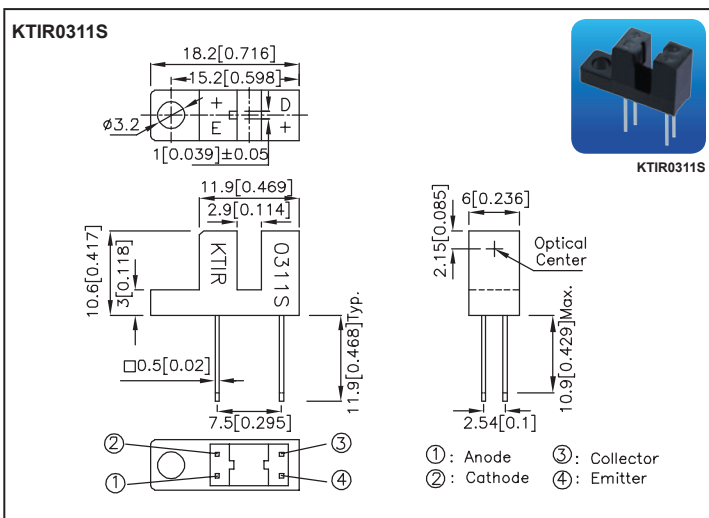
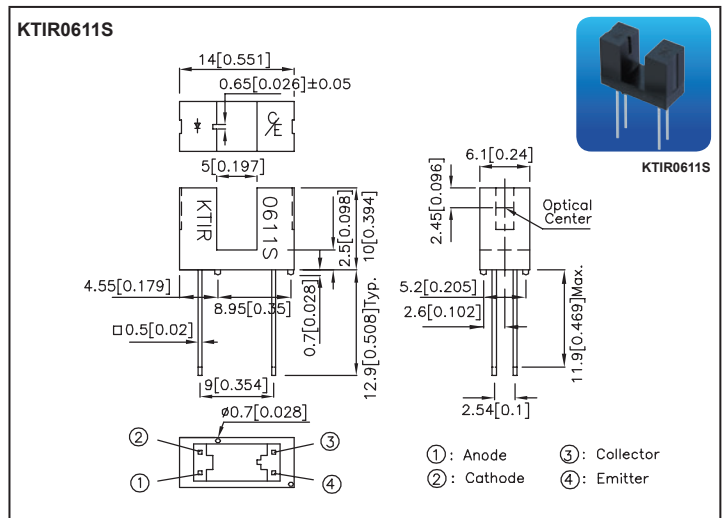
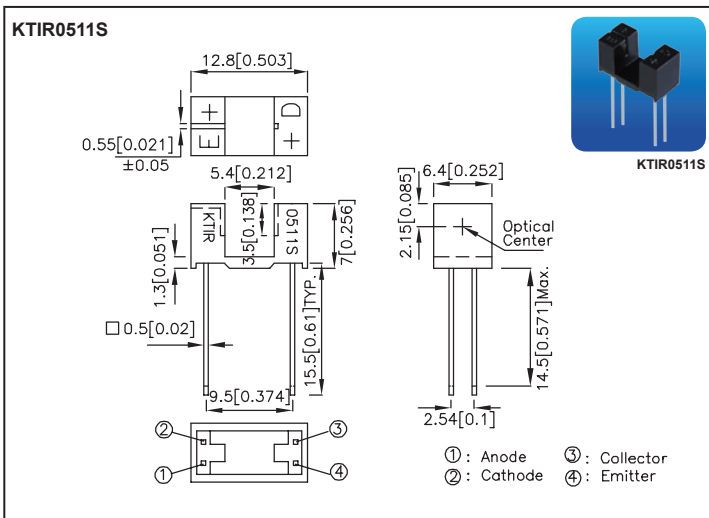


KB355NT



NOTES:
 1. All dimensions are in millimeters(inches).
 2. Tolerance is ±0.5mm(0.02 ") unless otherwise noted.

Part Number	Pin Configuration	Material	λP (nm)	CTR			$V_{CE(SAT)}$			Rise Time (μs)	Fall Time (μs)
				IF(mA)	$V_{CE(V)}$	Typ.(%)	IF(mA)	IC(mA)	Max.(V)	Typ.	Typ.
KTIR0511S		GaAs/SiC	940	20	5	10	40	1	0.4	5	4
KTIR0611S		GaAs/SiC	940	20	5	14	40	1	0.4	5	4
KTIR0311S		GaAs/SiC	940	20	5	38	40	1	0.4	5	4
KTIR0411S		GaAs/SiC	940	20	5	38	40	1	0.4	5	4

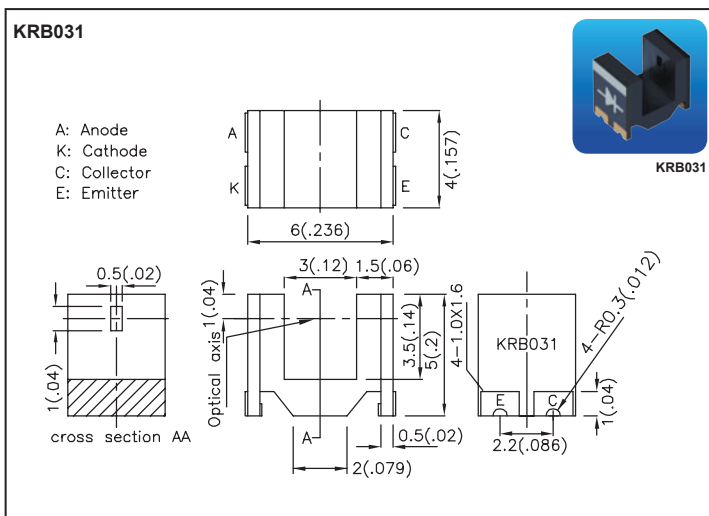
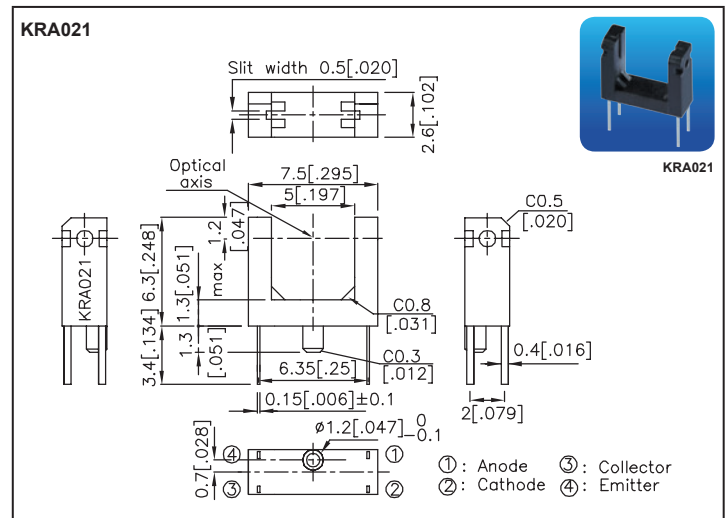
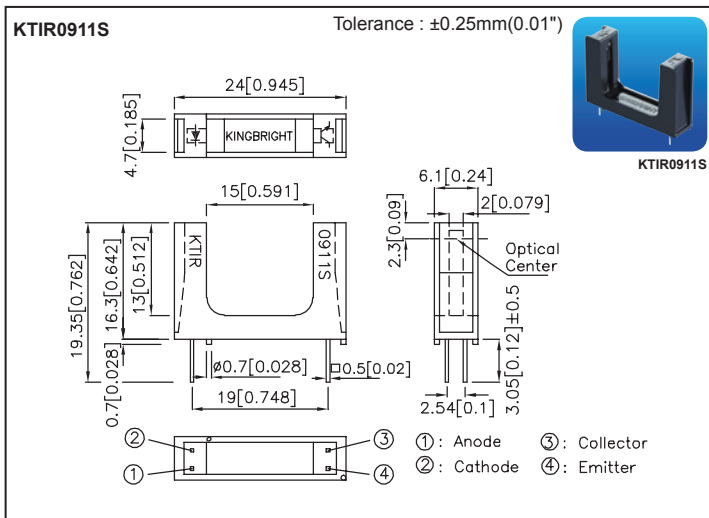


NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ ($0.01''$) unless otherwise noted.

Part Number	Pin Configuration	Material	λP (nm)	CTR			$V_{CE(SAT)}$			Rise Time (μs)	Fall Time (μs)
				IF(mA)	$V_{CE(V)}$	Typ.(%)	IF(mA)	IC(mA)	Max.(V)	Typ.	Typ.
KTIR0911S		GaAs/SiC	940	20	5	9.5	40	1	0.4	5	4
KRA021		GaAs/SiC	940	10	2	18	20	0.25	0.4	15	15

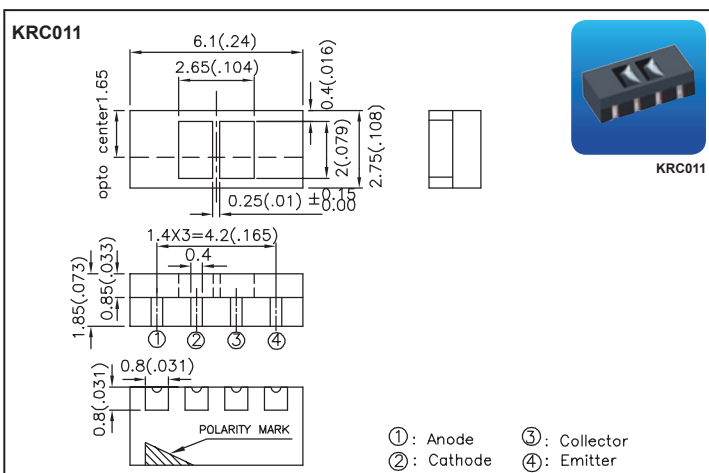
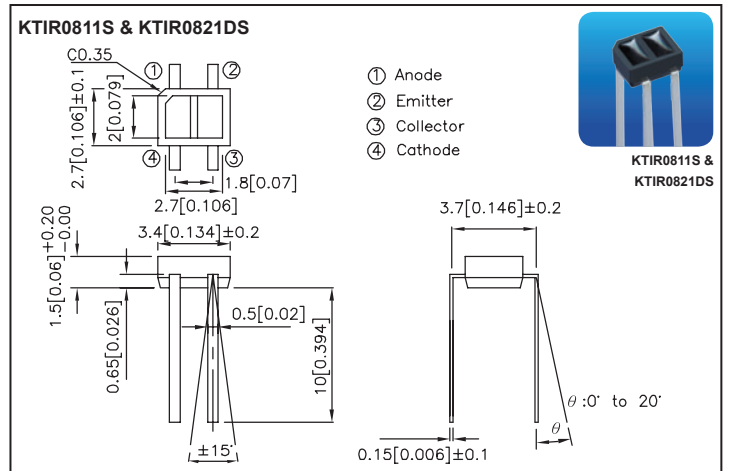
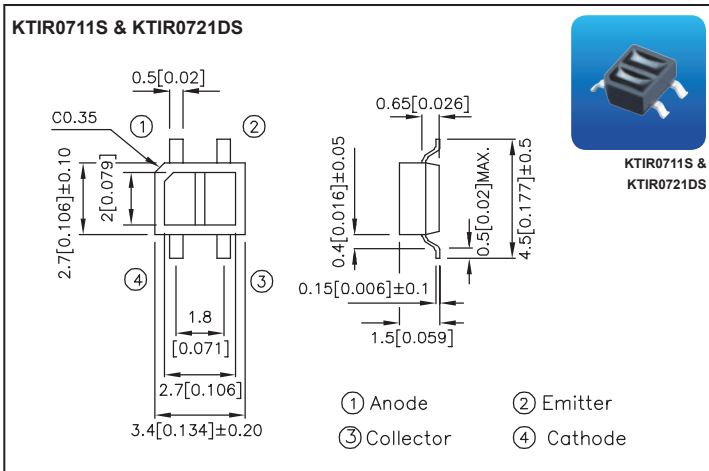
Part Number	Pin Configuration	Material	λP (nm)	$IC (\mu A)$		$V_{CE(SAT)}$			Rise Time (μs)	Fall Time (μs)
				$V_{CE}=5V, IF=5mA$		IF(mA)	IC(mA)	Max.(V)	Typ.	Typ.
				Typ.						
KRB031		GaAs/SiC	940	150	20	0.05	0.4	8	10	



NOTES:
 1. All dimensions are in millimeters(inches).
 2. Tolerance is $\pm 0.15mm(0.006")$ unless otherwise noted.

Part Number	Pin Configuration	Material	λ_p (nm)	IC (μ A)			V _{CE(SAT)}			Rise Time (μ s)	Fall Time (μ s)
				V _{CE} =2V, IF=4mA			IF(mA)	IC(mA)	Max.(V)	Typ.	Typ.
				Min.	Typ.	Max.					
KTIR0711S		GaAs/SiC	● 940	10	-	400	-	-	-	20	20
KTIR0721DS		GaAs/SiC	● 940	-	3000	-	-	-	-	80	70
KTIR0811S		GaAs/SiC	● 940	10	-	400	-	-	-	20	20
KTIR0821DS		GaAs/SiC	● 940	-	3000	-	-	-	-	80	70

Part Number	Pin Configuration	Material	λ_p (nm)	IC (μ A)			V _{CE(SAT)}			Rise Time (μ s)	Fall Time (μ s)
				V _{CE} =5V, IF=20mA			IF(mA)	IC(mA)	Max.(V)	Typ.	Typ.
				Min.	Typ.	Max.					
KRC011		GaAs/SiC	● 940	10	-	300	-	-	-	20	20



NOTES:
1. All dimensions are in millimeters(inches).
2. Tolerance is ±0.25mm(0.01") unless otherwise noted.