

QRE1113, QRE1113GR, QRE1114GR

ELECTRICAL/OPTICAL CHARACTERISTICS (T_A = 25 C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
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INPUT DIODE

V _F	Forward Voltage	I _F = 20 mA		1.2	1.6	V
I _R	Reverse Leakage Current	V _R = 5 V			10	μA
λ _{PE}	Peak Emission Wavelength	I _F = 20 mA		940		nm

OUTPUT TRANSISTOR

I _D	Collector-Emitter Dark Current	I _F = 0 mA, V _{CE} = 20 V			100	nA
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I _{C(ON)}	On-State Collector Current	I _F = 20 mA, V _{CE} = 5 V (Note 6)	QRE1113 & QRE1113GR	0.10	0.90		mA
			QRE1114GR	0.30		0.60	mA
I _{CX}	Cross-Talk Collector Current	I _F = 20 mA, V					

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TYPICAL PERFORMANCE CURVES (CONTINUED)

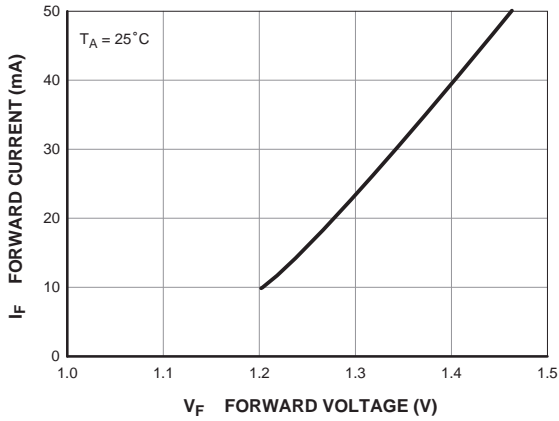


Figure 6. Forward Current vs. Forward Voltage

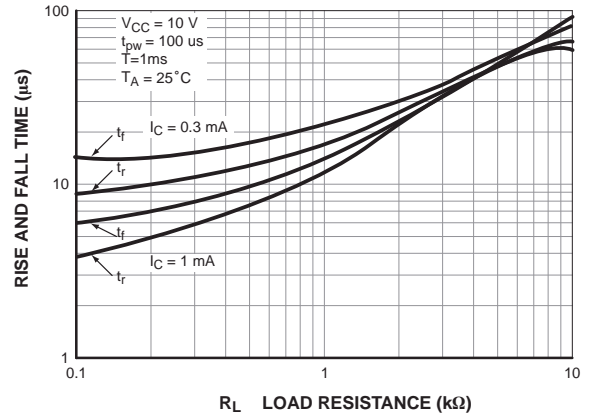


Figure 7. Rise and Fall Time vs. Load Resistance

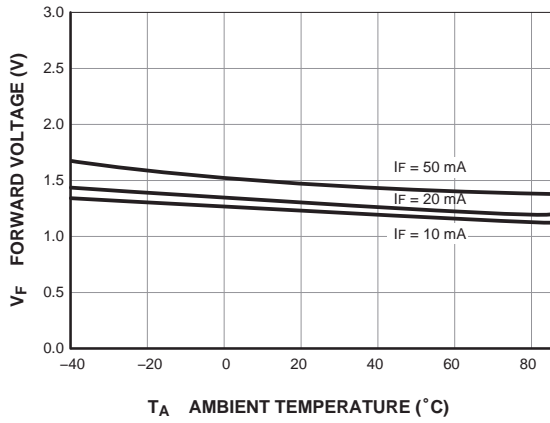


Figure 8. Forward Voltage vs. Ambient Temperature

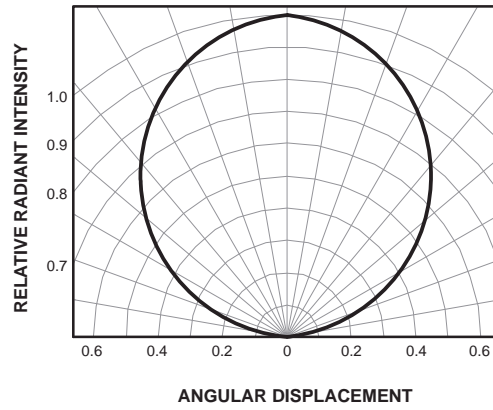


Figure 9. Radiation Diagram

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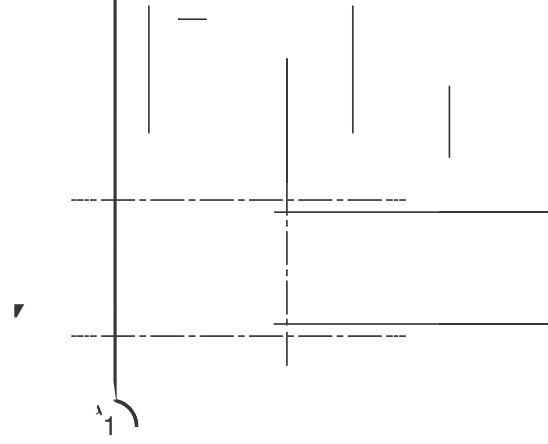
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Precautionary Notes

1. Refer to application note AND8003/D, "Storage and Handling of Dry Packed Surface Mounted Devices" for details of handling procedure.
2. Product soldering terminals are silver plated and oxidization may occur with prolonged exposure to ambient environment. Oxidized terminal may have poor solderability performance. Keep unsealed devices in moisture barrier bag sealed with desiccant or in dry cabinet at <5% relative humidity.
3. Store PCB in sealed moisture barrier bag together with desiccant or store in dry cabinet at <5% relative humidity. Mounted device that has been exposed to ambient environment for long period of time may suffer moisture related damage if PCB is subjected to subsequent high temperature processes.

REFLECTIVE RECTANGULAR THROUGH HOLE
CASE 100AQ
ISSUE 0

DATE 30 SEP 2016



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Notes:

1. Dimensions for all drawings ar

012

ARUSM-313 / REFLECTIVE RECTANGULAR SURFACE MOUNT
CASE 100CY
ISSUE O

DATE 31 JAN 2017

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1.50 0.07

1.10
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TO THIS PACKAGE
B. ALL DIMENS

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